

0400
03/13/01
OIPE

(2)

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/782,361

DATE: 03/08/2001
TIME: 13:47:08

Input Set : A:\es.txt
Output Set: N:\CRF3\03082001\I782361.raw

3 <110> APPLICANT: Hu, Yu-Wen
5 <120> TITLE OF INVENTION: PRIMER-SPECIFIC AND MISPAIR EXTENSION ASSAY FOR IDENTIFYING GENE
6 VARIATION
8 <130> FILE REFERENCE: 2883-4757US
C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/782,361
C--> 10 <141> CURRENT FILING DATE: 2001-02-13
10 <160> NUMBER OF SEQ ID NOS: 49
12 <170> SOFTWARE: PatentIn version 3.0
14 <210> SEQ ID NO: 1
15 <211> LENGTH: 25
16 <212> TYPE: DNA
17 <213> ORGANISM: Artificial
19 <220> FEATURE:
20 <223> OTHER INFORMATION: sense universal primer for PCR (first round)
22 <400> SEQUENCE: 1
23 ctccctgtg aggaactact gtctt 25
26 <210> SEQ ID NO: 2
27 <211> LENGTH: 20
28 <212> TYPE: DNA
29 <213> ORGANISM: Artificial
31 <220> FEATURE:
32 <223> OTHER INFORMATION: antisense universal primer for PCR (first round)
34 <400> SEQUENCE: 2
35 ctgcgaagca ccctatcagg 20
38 <210> SEQ ID NO: 3
39 <211> LENGTH: 31
40 <212> TYPE: DNA
41 <213> ORGANISM: Artificial
43 <220> FEATURE:
44 <223> OTHER INFORMATION: sense universal primer for PCR (second round)
46 <400> SEQUENCE: 3
47 ccatagtggt ctgcggaacc ggtgagtaca c 31
50 <210> SEQ ID NO: 4
51 <211> LENGTH: 18
52 <212> TYPE: DNA
53 <213> ORGANISM: Artificial
55 <220> FEATURE:
56 <223> OTHER INFORMATION: antisense universal primer for PCR (second round)
58 <400> SEQUENCE: 4
59 cccaacacta ctcggeta 18
62 <210> SEQ ID NO: 5
63 <211> LENGTH: 21
64 <212> TYPE: DNA
65 <213> ORGANISM: Artificial
67 <220> FEATURE:
68 <223> OTHER INFORMATION: primer for PSMEA
70 <400> SEQUENCE: 5

ENTERED

See p.5

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/782,361

DATE: 03/08/2001
TIME: 13:47:08

Input Set : A:\es.txt
Output Set: N:\CRF3\03082001\I782361.raw

```
71 ctcaatgcct ggagatttgg g 21
74 <210> SEQ ID NO: 6
75 <211> LENGTH: 20
76 <212> TYPE: DNA
77 <213> ORGANISM: Artificial
79 <220> FEATURE:
80 <223> OTHER INFORMATION: primer for PSMEA
82 <400> SEQUENCE: 6
83 caccggaatt gccaggacga 20
86 <210> SEQ ID NO: 7
87 <211> LENGTH: 21
88 <212> TYPE: DNA
89 <213> ORGANISM: Artificial
91 <220> FEATURE:
92 <223> OTHER INFORMATION: primer for PSMEA
94 <400> SEQUENCE: 7
95 acactactcg gctagcagtc t 21
98 <210> SEQ ID NO: 8
99 <211> LENGTH: 21
100 <212> TYPE: DNA
101 <213> ORGANISM: Artificial
103 <220> FEATURE:
104 <223> OTHER INFORMATION: primer for PSMEA
106 <400> SEQUENCE: 8
107 ccactctatg cccggtcatt t 21
110 <210> SEQ ID NO: 9
111 <211> LENGTH: 21
112 <212> TYPE: DNA
113 <213> ORGANISM: Artificial
115 <220> FEATURE:
116 <223> OTHER INFORMATION: primer for PSMEA
118 <400> SEQUENCE: 9
119 tatgtccggt catttgggca c 21
122 <210> SEQ ID NO: 10
123 <211> LENGTH: 21
124 <212> TYPE: DNA
125 <213> ORGANISM: Artificial
127 <220> FEATURE:
128 <223> OTHER INFORMATION: primer for PSMEA
130 <400> SEQUENCE: 10
131 cactctgtgc cgggccattt g 21
134 <210> SEQ ID NO: 11
135 <211> LENGTH: 19
136 <212> TYPE: DNA
137 <213> ORGANISM: Artificial
139 <220> FEATURE:
140 <223> OTHER INFORMATION: primer for PSMEA
142 <400> SEQUENCE: 11
143 accygaatcg ctgggggtga 19
```

RAW SEQUENCE LISTING DATE: 03/08/2001
 PATENT APPLICATION: US/09/782,361 TIME: 13:47:08

Input Set : A:\es.txt
 Output Set: N:\CRF3\03082001\I782361.raw

```

146 <210> SEQ ID NO: 12
147 <211> LENGTH: 19
148 <212> TYPE: DNA
149 <213> ORGANISM: Artificial
151 <220> FEATURE:
152 <223> OTHER INFORMATION: primer for PSMEA
154 <400> SEQUENCE: 12
155 accggaatcg ccgggatga 19
158 <210> SEQ ID NO: 13
159 <211> LENGTH: 21
160 <212> TYPE: DNA
161 <213> ORGANISM: Artificial
163 <220> FEATURE:
164 <223> OTHER INFORMATION: primer for PSMEA
166 <400> SEQUENCE: 13
167 cactactcgg ctagtgatct c 21
170 <210> SEQ ID NO: 14
171 <211> LENGTH: 19
172 <212> TYPE: DNA
173 <213> ORGANISM: Artificial
175 <220> FEATURE:
176 <223> OTHER INFORMATION: primer for PSMEA
178 <400> SEQUENCE: 14
179 gggggtcctg gaggtgtt 19
182 <210> SEQ ID NO: 15
183 <211> LENGTH: 22
184 <212> TYPE: DNA
185 <213> ORGANISM: Artificial
187 <220> FEATURE:
188 <223> OTHER INFORMATION: primer for PSMEA
190 <400> SEQUENCE: 15
191 cattgagcgg gtttgatcca at 22
194 <210> SEQ ID NO: 16
195 <211> LENGTH: 12
196 <212> TYPE: DNA
197 <213> ORGANISM: Artificial
199 <220> FEATURE:
200 <223> OTHER INFORMATION: Extension product of wild-type HIV-1
202 <400> SEQUENCE: 16
203 agtccacatc ct 12
206 <210> SEQ ID NO: 17
207 <211> LENGTH: 12
208 <212> TYPE: DNA
209 <213> ORGANISM: Artificial
211 <220> FEATURE:
212 <223> OTHER INFORMATION: Extension product of wild-type HIV-1
214 <400> SEQUENCE: 17
215 cgtccacatc ct 12
218 <210> SEQ ID NO: 18

```

RAW SEQUENCE LISTING DATE: 03/08/2001
 PATENT APPLICATION: US/09/782,361 TIME: 13:47:08

Input Set : A:\es.txt
 Output Set: N:\CRF3\03082001\I782361.raw

```

219 <211> LENGTH: 41
220 <212> TYPE: DNA
221 <213> ORGANISM: Artificial
223 <220> FEATURE:
224 <223> OTHER INFORMATION: L63 + primer sequences
226 <220> FEATURE:
227 <221> NAME/KEY: misc_feature
228 <222> LOCATION: (32)..(32) /
229 <223> OTHER INFORMATION: n can be any nucleotide
232 <220> FEATURE:
233 <221> NAME/KEY: misc_feature
234 <222> LOCATION: (41)..(41) /
235 <223> OTHER INFORMATION: n can be any nucleotide
238 <400> SEQUENCE: 18
W--> 239 gctttatgtc cacagatttc tatgagtacc tnatcatact n 41
242 <210> SEQ ID NO: 19
243 <211> LENGTH: 44
244 <212> TYPE: DNA
245 <213> ORGANISM: Artificial
247 <220> FEATURE:
248 <223> OTHER INFORMATION: L63P + primer sequences
250 <400> SEQUENCE: 19
251 agacagtatg atcaggtact catagaaatc tgtggacata aagc 44
254 <210> SEQ ID NO: 20
255 <211> LENGTH: 26
256 <212> TYPE: DNA
257 <213> ORGANISM: Artificial
259 <220> FEATURE:
260 <223> OTHER INFORMATION: pro63L(G)-R
262 <400> SEQUENCE: 20
263 gctttatgtc cacagatttc tatgag 26
266 <210> SEQ ID NO: 21
267 <211> LENGTH: 44
268 <212> TYPE: DNA
269 <213> ORGANISM: Artificial
271 <220> FEATURE:
272 <223> OTHER INFORMATION: L63P + primer sequences
274 <400> SEQUENCE: 21
275 agacagtatg atcaggtacc catagaaatc tgtggacata aagc 44
278 <210> SEQ ID NO: 22
279 <211> LENGTH: 41
280 <212> TYPE: DNA
281 <213> ORGANISM: Artificial
283 <220> FEATURE:
284 <223> OTHER INFORMATION: L63 + primer sequences
286 <220> FEATURE:
287 <221> NAME/KEY: misc_feature /
288 <222> LOCATION: (32)..(41)
289 <223> OTHER INFORMATION: n can be any nucleotide

```

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/782,361
 DATE: 03/08/2001
 TIME: 13:47:08
 Input Set : A:\es.txt
 Output Set: N:\CRF3\03082001\I782361.raw

```

292 <400> SEQUENCE: 22
W--> 293 gctttatgtc cacagatttc tatgggtacc tnatcatact n' 41
296 <210> SEQ ID NO: 23
297 <211> LENGTH: 26
298 <212> TYPE: DNA
299 <213> ORGANISM: Artificial
301 <220> FEATURE:
302 <223> OTHER INFORMATION: PRO90L-R
304 <400> SEQUENCE: 23
305 gctttatgtc cacagatttc tatggg 26
308 <210> SEQ ID NO: 24
309 <211> LENGTH: 33
310 <212> TYPE: DNA
311 <213> ORGANISM: Artificial
313 <220> FEATURE:
314 <223> OTHER INFORMATION: L90
316 <220> FEATURE:
317 <221> NAME/KEY: misc_feature
318 <222> LOCATION: (32)..(33) ✓
319 <223> OTHER INFORMATION: n can be any nucleotide
322 <400> SEQUENCE: 24
W--> 323 atttaaagtg caaccaatct gagtcttcag ann' 33
326 <210> SEQ ID NO: 25
327 <211> LENGTH: 33
328 <212> TYPE: DNA
329 <213> ORGANISM: Artificial
331 <220> FEATURE:
332 <223> OTHER INFORMATION: L90
334 <400> SEQUENCE: 25
335 aatctgaaga ctcagattgg ttgcacttta aat 33
338 <210> SEQ ID NO: 26
339 <211> LENGTH: 27
340 <212> TYPE: DNA
341 <213> ORGANISM: Artificial
343 <220> FEATURE:
344 <223> OTHER INFORMATION: PRO90L-R
346 <400> SEQUENCE: 26
347 atttaaagtg caaccaatct gagtctt 27
350 <210> SEQ ID NO: 27
351 <211> LENGTH: 33
352 <212> TYPE: DNA
353 <213> ORGANISM: Artificial
355 <220> FEATURE:
356 <223> OTHER INFORMATION: L90M
358 <400> SEQUENCE: 27
359 aatctgatga ctcagattgg ttgcacttta aat 33
362 <210> SEQ ID NO: 28
363 <211> LENGTH: 38
364 <212> TYPE: DNA

```

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/782,361

DATE: 03/08/2001

TIME: 13:47:09

Input Set : A:\es.txt

Output Set: N:\CRF3\03082001\I782361.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application No
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:239 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:293 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
L:323 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:377 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:431 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32
L:491 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36
L:525 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38
L:559 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40
L:607 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43
L:655 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46
L:675 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47